AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Previously Presented) A luminance control method for an organic electroluminescence display, characterized by comprising:

a first step of calculating a luminance accumulation value for each frame on the basis of a video input signal; and

a second step of controlling an amplitude of the video input signal on the basis of the luminance accumulation value calculated in the first step, and feeding to the organic electroluminescence display the video signal whose amplitude has been controlled and in that

in the second step, the amplitude of the video input signal is controlled, when the luminance accumulation value calculated in the first step exceeds a predetermined value, such that the larger the difference between the luminance accumulation value and the predetermined value is, the smaller the amplitude of the video input signal becomes.

2. (Canceled)

3. (Previously Presented) A luminance control method for an organic electroluminescence display, characterized by comprising:

a first step of calculating a luminance accumulation value for each frame on the basis of a video input signal;

a second step of controlling an amplitude of the video input signal on the basis of the luminance accumulation value calculated in the first step, and feeding to the organic electroluminescence display the video signal whose amplitude has been controlled and in that

in the second step, the amplitude of the video input signal is controlled, when the luminance accumulation value calculated in the first step exceeds a predetermined value, such that the larger the difference between the luminance accumulation value and the predetermined value is, the smaller the amplitude of the video input signal becomes;

the video input signal is a digital video signal, and

in the second step, a reference voltage supplied to a digital-to-analog converter for converting the digital video input signal into an analog video signal is controlled on the basis of the luminance accumulation value calculated in the first step, to control the amplitude of the video input signal.

4. (Previously Presented) The luminance control method for the organic electroluminescence display according to claim 3, characterized in that

the reference voltage supplied to the digital-to-analog converter includes a black-side reference voltage for defining a light-emitting luminance corresponding to a black level of the input signal and a white-side reference voltage for defining a light-emitting luminance corresponding to a white level of the input signal, and

in the second step, the white-side reference voltage is controlled on the basis of the luminance accumulation value calculated in the first step.

5. (Previously Presented) A luminance control circuit for an organic electroluminescence display, characterized by comprising

a digital-to-analog converter for converting a digital video input signal into an analog video output signal on the basis of input/output characteristics defined by a given reference voltage, and feeding the analog video output signal to the organic electroluminescence display; and

a reference voltage control circuit for controlling the reference voltage supplied to the digital-to-analog converter on a basis of the digital video input signal, and in that

the reference voltage control circuit comprises a luminance accumulation value calculation circuit for calculating a luminance accumulation value for each frame on the basis of a digital video input signal, and a voltage control circuit for controlling the reference voltage supplied to the digital-to-analog converter on the basis of the luminance accumulation value calculated by the luminance accumulation value calculation circuit

the reference voltage supplied to the digital-to-analog converter includes a black-side reference voltage for defining a light-emitting luminance corresponding to a black level of the input signal and a white-side reference voltage for defining a light-emitting luminance corresponding to a white level of the input signal, and

the voltage control circuit controls, when the luminance accumulated value calculated by the luminance accumulation value calculation circuit exceeds a predetermined value, the white-side reference voltage such that the larger the difference between the luminance accumulation value and the predetermined value is, the lower the light-emitting luminance corresponding to the white level of the input signal becomes.

Claims 6-7 (Canceled)

8. (Previously Presented) The luminance control circuit for the organic electroluminescence display according to claim 5, characterized in that

the voltage control circuit comprises a gain calculation circuit for calculating a gain for controlling the white-side reference voltage on the basis of the luminance accumulation value calculated by the luminance accumulation value calculation circuit, and a control circuit for controlling the white-side reference voltage on the basis of the gain calculated by the gain calculation circuit.

9. (Original) The luminance control circuit for the organic electroluminescence display according to claim 8, characterized in that

the gain calculation circuit has such input/output characteristics that a gain to be outputted is set to a constant value when the inputted luminance accumulation value is not more than a predetermined value, and the larger the inputted luminance accumulation value is, the smaller the gain to be outputted is made when the inputted luminance accumulation value exceeds the predetermined value, and

the control circuit controls the white-side reference voltage such that the smaller the gain is, the lower the light-emitting luminance corresponding to the white level of the input signal becomes.

10. (Previously Presented) The luminance control circuit for the organic electroluminescence display according to claim 5, characterized in that

the voltage control circuit comprises a gain calculation circuit for calculating a first gain for controlling the white-side reference voltage on the basis of the luminance accumulation value calculated by the luminance accumulation value calculation circuit, a multiplication circuit for multiplying the first gain calculated by the gain calculation circuit by a second gain given from the exterior, and a control circuit for controlling the white-side reference voltage on the basis of a third gain which is the result of the multiplication by the multiplication circuit.

11. (Original) The luminance control circuit for the organic electroluminescence display according to claim 10, characterized in that

the gain calculation circuit has such input/output characteristics that a gain to be outputted is set to a constant value when the inputted luminance accumulation value is not more than a predetermined value, and the larger the inputted luminance accumulation value is, the smaller the gain to be outputted is made when the inputted luminance accumulation value exceeds the predetermined value, and

the control circuit controls the white-side reference voltage such that the smaller the third gain is, the lower the light-emitting luminance corresponding to the white level of the input signal becomes.

Claims 12-16. (Cancelled)

17. (Currently Amended) An apparatus for receiving video input signals and transmitting video output signals, wherein the apparatus comprises: ~~is adapted to perform at least the following steps:~~

a) a luminance accumulation calculation portion configured for calculating a luminance accumulation for each frame, as a first function of the video input signals;

b) a gain calculation portion configured for calculating a gain, as a second function of the luminance accumulation and a predetermined value, and wherein the gain decreases if the luminance accumulation exceeds at least one predetermined value;

c) a generating portion configured for generating controlled white-side reference voltages, as a third function of black-side reference voltages, white-side reference voltages, and the gain;

d) a video transmission portion configured for transmitting video output signals, as a fourth function of the video input signals, the black-side reference voltages, and the controlled white-side reference voltages.